



# Asus Prime H610M-R D4 Manual



1

2

Table Of Contents

3

4

5

6

7

8

9

10

11

12

13

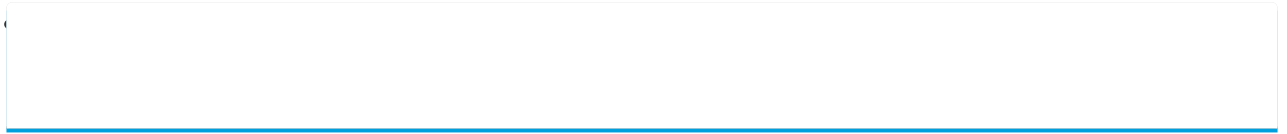
14

15

16

17

18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30



•

•

## Bookmarks

[Download this manual](#)

## Quick Links





PRIME H610M-R D4



## Table of Contents

[Next Page](#)

1  
2  
3  
4  
5

## Related Manuals for Asus Prime H610M-R D4

[Motherboard Asus PRIME H610M-R Manual](#)

(32 pages)

[Motherboard Asus PRIME H610M-R Quick Start Manual](#)

(2 pages)

[Motherboard Asus PRIME H610M-E D4 Manual](#)

(34 pages)

[Motherboard Asus PRIME H610M-K D4 Manual](#)

(32 pages)

[Motherboard Asus PRIME H610M-A D4 Manual](#)

(34 pages)

[Motherboard Asus PRIME H610M-D D4 Manual](#)

(32 pages)

[Motherboard Asus Pro H610M-CT D4 Manual](#)

(32 pages)

[Motherboard Asus PRIME H610M-F D4 Manual](#)

(30 pages)

[Motherboard Asus PRIME H610M2 FPT Manual](#)

(32 pages)

[Motherboard Asus PRIME H610M-CS D4 Manual](#)

(30 pages)

[Motherboard Asus PRIME H610M-A WIFI D4 Manual](#)

(36 pages)

[Motherboard Asus H610M-IM-A Manual](#)

Industrial motherboard (53 pages)

[Motherboard Asus PRIME H610M-D Instruction Manual](#)

(31 pages)

[Motherboard Asus PRIME H610M-K ARGB Manual](#)

(31 pages)

[Motherboard Asus PRIME H610M-C/PS D4 Manual](#)

(62 pages)

[Motherboard Asus PRIME H610M-E Manual](#)

(33 pages)

## Summary of Contents for Asus Prime H610M-R D4

[Page 1](#) PRIME H610M-R D4...

[Page 2](#) Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification or alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

[Page 3: Table Of Contents](#)

Contents Safety information ..... iv About this guide .....v Package contents ..... vi PRIME H610M-R D4 specifications summary .....vi Chapter 1 Product Introduction Before you proceed .....1-1 Motherboard overview ..... 1-1 Central

Processing Unit (CPU) .....1-7 System memory .....

## [Page 4: Safety Information](#)

Safety information Electrical safety • To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system. • When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.

## [Page 5: About This Guide](#)

Refer to the following sources for additional information and for product and software updates. ASUS website The ASUS website provides updated information on ASUS hardware and software products. Refer to the ASUS contact information. Optional documentation Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer.

## [Page 6: Package Contents](#)

Supports Intel Extreme Memory Profile (XMP) ® \* Actual memory data rate depends on the CPU types and DRAM modules, for more information refer to [www.asus.com](http://www.asus.com) for memory support list. 1 x D-Sub port 1 x DVI-D port 1 x HDMI port\*\* ® ...

[Page 7](#) PRIME H610M-R D4 specifications summary Rear USB (Total 4 ports) 2 x USB 3.2 Gen 1 ports (2 x Type-A) 2 x USB 2.0 ports (2 x Type-A) Front USB (Total 6 ports) 1 x USB 3.2 Gen 1 header supports additional 2 USB 3.2 Gen 1 ports 2 x USB 2.0 headers support additional 4 USB 2.0 ports...

[Page 8](#) ® Operating System Windows 10 64-bit ® mATX Form Factor Form Factor 8.9 inch x 7.6 inch (22.6 cm x 19.3 cm) Specifications are subject to change without notice. Please refer to the ASUS website for the latest specifications. viii...

## [Page 9: Chapter 1 Product Introduction](#)

Unplug the power cord before installing or removing the motherboard. Failure to do so can cause you physical injury and damage motherboard components. The pin definitions in this chapter are for reference only. The pin names depend on the location of the header/jumper/connector. ASUS PRIME H610M-R D4...

[Page 10](#) 1.2.1 Layout contents 1. CPU socket The motherboard comes with a LGA1700 Socket designed for 12 Gen Intel Core™, ® Pentium Gold and Celeron Processors. ® ® • Supports up to Intel 65W CPU ® For more details, refer to Central Processing Unit (CPU). • ...

[Page 11](#) This header is for a serial (COM) port. Connect the serial port module cable to this header, then install the module to a slot opening at the back of the PIN 1 system chassis. The COM port module is purchased separately. ASUS PRIME H610M-R D4...

[Page 12](#) 13. Front Panel Audio header This header is for a chassis-mounted front panel audio I/O module that supports HD audio standard. Connect one end of the front panel audio I/O module cable to this header. AAFP • We recommend that you connect a high-definition front panel audio module to this header to avail of the motherboard's high- definition audio capability.

[Page 13](#) Line In port (light blue). This port connects the tape, CD, DVD player, or other audio sources. Line Out port (lime). This port connects a headphone or a speaker. In 4-channel, 5.1-channel, and 7.1-channel configurations, the function of this port becomes Front Speaker Out. ASUS PRIME H610M-R D4...

[Page 14](#) PS/2 keyboard (purple) port. This port is for a PS/2 keyboard. DVI-D port. This port is for any DVI-D compatible device. DVI-D can not be converted to output from RGB Signal to CRT and is not compatible with DVI-I. HDMI port.

## [Page 15: Central Processing Unit \(Cpu\)](#)

CPU designed for LGA1155, LGA1156, LGA1151, and LGA1200 sockets on the LGA1700 socket. • ASUS will not cover damages resulting from incorrect CPU installation/removal, incorrect CPU

orientation/placement, or other damages resulting from negligence by the user. Installing the CPU...

[Page 16](#) Chapter 1: Product Introduction...

### [Page 17: System Memory](#)

Check with the retailer to get the correct memory modules. • Actual memory data rate depends on the CPU types and DRAM modules, for more information refer to [www.asus.com](http://www.asus.com) for the Memory QVL (Qualified Vendors Lists). Recommended memory configurations DIMM\_A1...

[Page 18](#) Installing a DIMM To remove a DIMM 1-10 Chapter 1: Product Introduction...

### [Page 19: Chapter 2 Bios Information](#)

BIOS Information Knowing BIOS The new ASUS UEFI BIOS is a Unified Extensible Interface that complies with UEFI architecture, offering a user-friendly interface that goes beyond the traditional keyboard- only BIOS controls to enable a more flexible and convenient mouse input. You can easily navigate the new UEFI BIOS with the same smoothness as your operating system.

### [Page 20: Bios Setup Program](#)

BIOS Setup program Use the BIOS Setup to update the BIOS or configure its parameters. The BIOS screens include navigation keys and brief onscreen help to guide you in using the BIOS Setup program. Entering BIOS at startup To enter BIOS Setup at startup, press <Delete> or <F2> during the Power-On Self Test (POST).

### [Page 21: Asus Ez Flash 3](#)

ASUS EZ Flash 3 The ASUS EZ Flash 3 feature allows you to update the BIOS without using an OS-based utility. Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the Load Optimized Defaults item under the Exit menu or press hotkey <F5>.

### [Page 22: Asus Crashfree Bios 3](#)

ASUS CrashFree BIOS 3 The ASUS CrashFree BIOS 3 utility is an auto recovery tool that allows you to restore the BIOS file when it fails or gets corrupted during the updating process. You can restore a corrupted BIOS file using a USB flash drive that contains the BIOS file.

### [Page 23: Appendix](#)

Appendix Notices FCC Compliance Information Responsible Party: Asus Computer International Address: 48720 Kato Rd., Fremont, CA 94538, USA Phone / Fax No: (510)739-3777 / (510)608-4555 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

[Page 24](#) Compliance Statement of Innovation, Science and Economic Development Canada (ISED) This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

[Page 25](#) ASUS products sold in Vietnam, on or after September 23, 2011, meet the requirements of the Vietnam Circular 30/2011/TT-BCT. Các sản phẩm ASUS bán tại Việt Nam, vào ngày 23 tháng 9 năm 2011 trở về sau, đều phải đáp ứng các yêu cầu của Thông tư 30/2011/TT-BCT của Việt Nam.

[Page 26](#) ASUS Recycling/Takeback Services ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials.

[Page 27](#) доступний на: [www.asus.com/support](http://www.asus.com/support) Cijeli tekst EU izjave o sukladnosti dostupan je na: [www.asus.com/support](http://www.asus.com/support) Čeština Společnost ASUSTeK Computer Inc. tímto prohlašuje, že

Türkçe AsusTek Computer Inc., bu aygıtın temel gereksinimlerle ve ilişkili toto zařizení...

### [Page 28: Warranty](#)

• ASUS offers a voluntary manufacturer's Commercial Guarantee. • ASUS dragovoljno nudi komercijalno proizvođačko jamstvo. • ASUS reserves the right to interpret the provisions of the ASUS • ASUS zadržava prava na tumačenje odredbi ASUS komercijalnog Commercial Guarantee. jamstva. •...

[Page 29](#) • ASUS tilbyr som produsent en frivillig kommersiell garanti. • Bảo hành thương mại này của ASUS được cung cấp độc lập và ngoài • ASUS forbeholder seg retten til å tolke bestemmelsene i ASUS sin Bảo đảm pháp lý theo luật định và không có cách nào ảnh hưởng đến kommersielle garanti.

### [Page 30: Asus Contact Information](#)

Address: 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan ASUS COMPUTER INTERNATIONAL (America) Address: 48720 Kato Rd., Fremont, CA 94538, USA ASUS COMPUTER GmbH (Germany and Austria) Address: Harkortstrasse 21-23, 40880 Ratingen, Germany ASUSTeK (UK) LIMITED Address: 1st Floor, Sackville House, 143-149 Fenchurch Street, London, EC3M 6BL,...